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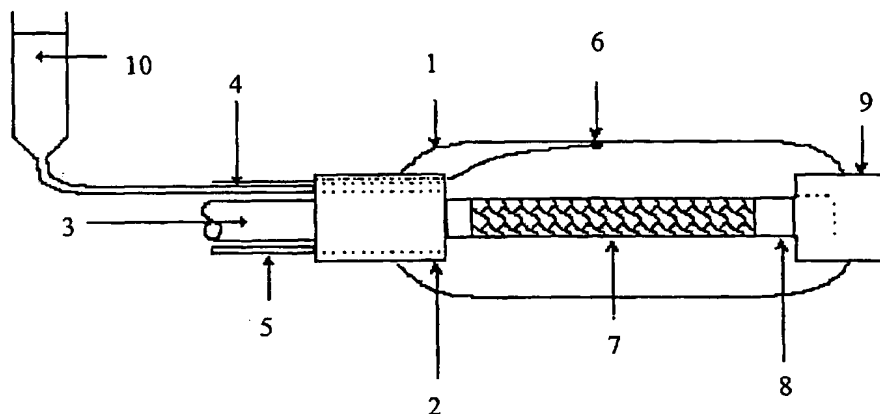
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(54) Title: MICROWAVE HOLLOW ORGAN PROBE



(57) Abstract: An apparatus for heat ablation of the internal wall of a hollow organ such as the oesophagus comprises a catheter having at least one internal lumen, a balloon located at the distal end of the catheter and attached to a lumen, a supply of a liquid for filling the balloon via the lumen, a tuned microwave antenna located in the region of the balloon for radiating microwave energy at a predetermined frequency to heat the balloon to a temperature suitable for heat ablation of the hollow organ wall tissue, a waveguide for supplying microwave energy to the microwave antenna, and a temperature probe to measure the temperature of the balloon. The balloon is filled from the proximal end of the catheter with a liquid having a dielectric constant of from 41 to 63 and a conductivity of from 1.0 Sm^{-1} to 1.5 Sm^{-1} .